

TEMPORARY SERVICES

1. SCOPE

1.1 Intent. This standard specification describes the requirements for the Contractor to provide temporary services for Coast Guard vessels.

2. REFERENCES

COAST GUARD DRAWINGS

None.

COAST GUARD PUBLICATIONS

None.

OTHER REFERENCES

International Code Council (ICC) International Building Code (IBC), 2012, International Building Code

International Code Council (ICC) International Fire Code (IFC), 2012, International Fire Code
National Fire Protection Association (NFPA) 70, 2011, National Electrical Code

3. REQUIREMENTS

3.1 General. The Contractor shall provide temporary services for the vessel, for the duration of the Contract performance period at the Contractor's facility or the vessel's home pier as applicable.

3.2 Schedule of connection. The Contractor shall ensure that all temporary services are connected, operational, and ready for use within five hours of the vessel's arrival at the Contractor's facility. Make connections at the locations specified by the Coast Guard Inspector.

3.2.1 Service disruption. Notify the Coast Guard Inspector 24 hours before scheduled disruptions of the temporary services. The Contractor may disconnect required temporary services only when shifting the vessel, or securing an associated system for authorized work. If a provided service is unexpectedly disrupted, notify the COR of the disruption and provide an estimated time until restored.

3.2.2 Service restoration. Ensure that whenever the vessel is moved, all disrupted services are restored within one hour after movement.

3.3 Service particulars. The Contractor shall provide the following temporary services, as specified in the work item:

NOTE

Each sub-paragraph associated with paragraph 3.3 (Services particulars) relates directly to the identical sub-paragraph number in Table I (Service Selection) of the invoking work item, titled “Temporary Services, Provide”.

3.3.1 Office space. Provide an office space for use by vessel personnel, located on the Contractor’s facility and within a five minute walk from the vessel. The office space shall:

- Meet or exceed the building and fire requirements specified in ICC/IBC and ICC/IFC.
- Have adequate overhead lighting and electrical convenience receptacles. Quantity and placement of the receptacle outlets shall be in accordance with NFPA 70.
- Be equipped with at least three desks, three chairs, and telephone capability.
- Have heating, filtered ventilation, and air conditioning to maintain temperatures in the 65 to 75 degree Fahrenheit range.
- Have an entry door with installed locks and at least two keys provided to the Coast Guard Inspector.
- Have a copy machine and facsimile (fax) machine in good, working order, for use by vessel personnel.

3.3.2 Telephone. Provide the number of independent and private telephone lines specified in Table I below, connected to Contractor-furnished telephones, at the locations designated by the Coast Guard Inspector. One of the lines shall be a high speed digital subscriber line (HDSL) circuit with voice capability and a minimum of 256 kbps upload and 1.544 Mbps download data transfer rates from the local telephone company’s entrance facility demarcation point to the cutter’s point of service. For cutters of less than 200 feet in length, the download minimum data transfer rate may be reduced to 756 kbps. A minimum of one provided line shall have an extension aboard the vessel, to allow the Watchstander immediate phone access. One line, other than that for the Watchstander, shall be suitable for connecting to a facsimile machine.

3.3.2.1 Direct dial. The lines may be routed through the Contractor’s switchboard, with direct dial calls that can be made to and from the office and vessel extensions 24 hours per day. If approved by the COR, the Contractor may tie the telephone lines into the ship’s telephone system.

3.3.2.2 Long distance calls. Long distance calls shall be billed to the vessel.

TABLE I - PRIVATE TELEPHONE LINES

VESSEL		TELEPHONE
LENGTH (feet)	TYPE	PRIVATE LINES*
65	WLI	4
	WLR	4
	WYTL	3
75	WLIC	4
	WLR	4
87	WPB	4
100	WLI	4
	WLIC	4

VESSEL		TELEPHONE
110	WPB	4
140	WTGB	4
154	WPC	4
160	WLIC	4
175	WLM	4
210	WMEC	5
225	WLB	5
240	WLBB	5
270	WMEC	5
282	WMEC	5
295	WIX	5
378	WHEC	5
400	WAGB	5
418	WMSL	5
420	WAGB	5
*NOTE: One line shall be capable of facsimile transmission and one shall be set up for HDSL.		

3.3.3 Parking. Provide parking spaces for the ship's crew as specified in Table II below. The spaces listed in column (A) shall be as close as reasonably possible to the vessel, but not to exceed a five minute walk from the vessel and office space (if provided) and within the Contractor's facility. The spaces listed in column (B) shall be within a 10-minute walk of the vessel.

TABLE II - PARKING SPACES

VESSEL		PARKING SPACES	
LENGTH (feet)	TYPE	A	B
65	WLI	3	4
	WLR	3	10
	WYTL	3	3
75	WLIC	3	10
	WLR	3	10
87	WPB	3	8
100	WLI	3	10
	WLIC	3	10
110	WPB	3	8
140	WTGB	3	6
154	WPC	3	9
160	WLIC	3	10
175	WLM	3	10
210	WMEC	5	40
225	WLB	3	20
240	WLBB	4	20
270	WMEC	5	40
282	WMEC	5	40

VESSEL		PARKING SPACES	
295	WIX	5	10
378	WHEC	6	50
400	WAGB	6	50
418	WMSL	6	50
420	WAGB	6	50

3.3.4 Duty section berthing. Provide temporary berthing for duty section personnel in the form of an enclosed, permanent or semi-permanent berthing facility. Locate as close as reasonably possible to the vessel and the toilet and shower facilities, but no further than a three-minute walk to either.

3.3.4.1 Temporary duty section berthing shall be provided when any of the following conditions is true in the shipboard berthing area between 1900 each evening and 0700 the following morning:

- Absence of a twin-size bed for each duty section member, equipped with an individual locker that can be padlocked. Hot racking during the duty day is not permitted.
- Presence of noxious fumes or airborne particulate.
- Inability to deliver contaminant-free supply air or exhaust ventilation at a rate of at least 5 standard cubic feet per minute per person.
- Impact or impulsive type noise above 60 dBA or steady-state weighted noise level above 70 dBA.
- Ambient air temperature above 80°F (dry bulb) or 62.5°F (wet bulb).
- Ambient air temperature below 65°F (dry bulb).
- Missing, dirty, or unsanitary decking and furnishings.
- Inoperable smoke detector or fire alarm system. A temporary battery powered smoke detector that only alarms within the berthing area may be installed to compensate.
- Inoperable main announcing system (circuit 1MC). A hardwired temporary announcing system may be installed to compensate. Such a system shall be configured so that the quarterdeck watchstander can rapidly summon assistance from sleeping personnel.
- Absence of privacy or escape route. Berthing area compartment access doors and escape scuttles shall be operational with an exit path to the weather. Temporary closures that provide privacy but which may not be tight fitting are acceptable. No work shall occur within an occupied berthing area during the back shifts.
- Inability to provide separate berthing areas for mixed gender crew.
- Inoperable lighting or receptacles. Temporary lighting, including low level red night lighting, and receptacles may be installed to compensate.

3.3.4.2 The duty section berthing facility shall:

- Meet or exceed the building and fire requirements specified in ICC/IBC and ICC/IFC.
- Have two separate berthing spaces, one for male personnel and one for female personnel, for the numbers specified in the work item.
- A twin-size bed, for each occupant, equipped with an individual locker that can be padlocked. Bunk beds are acceptable, with an individual locker that can be padlocked for each bed.
- Have adequate overhead lighting and electrical power provided, with a minimum of one 20-ampere, 120 volt, grounding-type receptacle outlet, in accordance with NFPA 70.

- Be equipped with filtered HVAC, to maintain temperatures in the 65 to 75 degree Fahrenheit range; include local climate control for the occupants.
- Have a lock with at least two keys, installed in each berthing area entrance; keys shall be provided to the Coast Guard Inspector.
- Have an installed, audible and visual alarm in the berthing facility that can be actuated from the vessel's quarterdeck in the event of a shipboard emergency.
- Be cleaned, serviced, and have trash removed, on a daily basis.

3.3.5 Electrical power. Provide flexible cable(s), mating plug(s), and 60 Hz, three-phase electrical power to the vessel's shore power receptacle(s) as specified in Table III below. Cutter owned shore power cable(s) shall not be used.

3.3.5.1 Shore Power Requirements.

3.3.5.1.1 Except for those cutters with an onboard shore power isolation transformer, only a single ungrounded shore power source shall be used for supplying electrical power, i.e. the generator or the transformer secondary windings supplying the shore tie must have all phases and any neutral insulated from earth with the frame of such equipment bonded to ground. Paralleled transformers or generators shall not be used.

NOTE

Many commercial ship repair facilities are configured with 480Y/277 volt shore power along the waterfront. Dual voltage systems are grounded to comply with NFPA 70 and cannot be connected directly to a cutter's ship service power distribution system without an isolation transformer. Many single voltage 480 volt shore power systems are also derived from wye connected transformer secondary windings and are often grounded at the neutral point to comply with electric utility company regulations, even when the neutral conductor is not run to the dockside connection box or panel. Although rare, truly delta wound sources may be grounded at a corner or the midpoint of a phase winding. A careful evaluation of dockside shore power infrastructure for compliance with these requirements is highly recommended before bidding; a failure to properly plan will not be considered justification for delay or additional compensation.

A shore power isolation transformer will not be supplied by the Government unless it is already permanently installed on board the cutter (BAYBERRY, ELDERBERRY, KANKAKEE, GREENBRIER, and BLUEBELL) or the invoking work item specifically provides it as Government furnished property.

3.3.5.1.2 When measured at the vessel's switchboard, shore power steady state voltage between all phase pairs shall be between 97% and 105% of the nominal value given in Table III.

3.3.5.1.3 One or more three pole circuit breakers, accessible to Ship's Force for emergency disconnect use, shall be installed on the line side of each shore power cable. The trip set point of each circuit breaker shall be no greater than the total ampacity of all cables connected to it. When a circuit breaker is located farther than 100 yards from the quarterdeck, a remote circuit breaker trip shall be installed near the brow leading to the quarterdeck. The remote trip shall simultaneously open all dockside shore power circuit breakers feeding the cutter and shall not require operating power from any source except the shore power transformer or generator.

3.3.5.1.4 The ungrounded secondary windings of the transformer that feeds the main power distribution bus of the cutter shall not supply any other vessel.

3.3.5.1.5 Each shore power cable shall be suitable for the local environmental conditions and shall be adequately supported for tidal variations so as to not become submerged. Cables shall be protected from chafing damage at the quay wall, as well as along personnel and equipment access routes.

3.3.5.1.6 To prevent interference, ground detection equipment ashore shall be secured while shore power is connected to a cutter with operable on board main bus ground detection system.

3.3.5.1.7 Except for the 120 foot barges, a Coast Guard barge is normally powered via an umbilical cord from its tender's electrical power distribution system. For situations where the tender and barge are separated or the barge has its own electrical power generating plant, furnish shore power to the barge as shown in Table III.

3.3.5.1.8 If the shore power source is not derived from an electric utility, the following requirements also apply:

3.3.5.1.8.1 Steady state line frequency shall be maintained by an automatic governor system over the full range of loading.

3.3.5.1.8.2 If the cutter cannot monitor shore power or main bus frequency with installed instrumentation, provide temporary frequency metering that has been calibrated within one year. Such metering shall be located at the primary watch station of the in port engineering watchstander.

3.3.5.2 Testing.

3.3.5.2.1 Perform the following tests in the presence of the Coast Guard Inspector. Repeat these tests whenever the shore tie is disconnected for more than 8 hours, the cutter is relocated to a different berth or drydock, or a shore tie cable is repaired, replaced, or modified.

3.3.5.2.2 Prior to plugging in shore tie cabling to the cutter's receptacle(s):

3.3.5.2.2.1 Use a 500 VDC insulation resistance tester to measure and log the insulation resistance readings on each cable between each pair of phase conductors and between each phase and ground. The insulation resistance of each cable shall be no less than 500 kilohms.

3.3.5.2.2.2 Establish an electrical safety area for performing energized testing at the cutter end of each shore tie cable. Open or remove the protective cover and place each shore tie cable plug on dry insulated matting. Provide appropriate protection from falling and sprayed liquids during the tests. Energize each cable from the shore power source and verify that all three line to line voltages meet paragraph 3.3.5.1.2 above, except that one of the no load readings may be as much 107% of nominal.

3.3.5.2.2.3 Momentarily energize a test lamp between any two phases of one shore power cable to verify operability for the tests below. The test lamp shall consist of one or more series connected incandescent bulbs with an optional step down transformer. The voltage and power ratings of all components shall be suitable for visually detecting the presence of shore power voltage without false indications from capacitive coupling.

3.3.5.2.2.4 For cutters without an on board shore power isolation transformer, connect the test lamp between any shore power cable phase and a known low resistance earth ground. The test lamp shall not

glow. If the test lamp glows, then shore power cannot be connected to the cutter until the ground is cleared and the test is reperformed satisfactorily.

3.3.5.2.2.5 When more than one shore power cable is to be connected to the cutter, verify that the test lamp does not illuminate when connected between the phase A pin of one shore power cable plug and the phase A pin on each of the other plugs when tested one at a time. Reperform this check with either the phase B or phase C pins. If the lamp illuminates at anytime during this test, then correct the phasing at the source end of the affected cable(s) and reperform the test of this paragraph in its entirety.

3.3.5.2.2.6 Momentarily energize the test lamp between any two phases of a shore power cable to reverify that it was operable during the tests above.

3.3.5.2.2.7 De-energize each shore power cable and disestablish the electrical safety area.

3.3.5.2.3 Verify that each in hull shore power circuit breaker is open. Plug in each shore power cable to the cutter, ensuring that all locking devices are properly latched. Energize the shore tie and verify correct phase rotation using the installed switchboard metering. If phase rotation is incorrect, de-energize shore power, reverse the same two phases on each shore power cable, and repeat all tests of Section 3.3.5.2 above.

3.3.5.2.4 After transferring all shipboard electrical loads to shore power, verify the following parameters using installed metering:

3.3.5.2.4.1 All three steady state line to line voltage pairs meet paragraph 3.3.5.1.2 above.

3.3.5.2.4.2 Phase currents are balanced as expected from prior operating history and are within the ampacity of the shore power cabling.

3.3.5.2.4.3 If the shore power source is not derived from an electric utility, steady state line frequency is between 58.2 and 61.8 Hz. The frequency of electric utility furnished power need not be verified.

3.3.5.3 Billing.

3.3.5.3.1 Unless shore power is being supplied from a temporary generator, meter the electrical power consumed by the cutter. Arrange the metering so as not to monitor power tools, heaters, fans, air compressors, welding machines, flushing rigs, and other equipment used to perform or support contracted work. For bidding purposes, assume that the cutter will consume the daily amount of electrical energy shown in Table III.

3.3.5.3.2 Upon completion of the availability, submit a CFR documenting the actual electrical energy consumption of the cutter during the availability. If usage exceeds the amount shown in Table III multiplied by the number of days on shore power, submit a request for equitable adjustment to be compensated for the difference. If less than the amount designated is actually used, the Government shall receive a credit for the savings.

TABLE III - ELECTRICAL CAPACITIES

VESSEL		Nominal Voltage (AC Volts)	Maximum Current (A)	Expected Energy Use (kWh/day)
LENGTH (feet)	TYPE			
65	WLI	450	60	300
	WLR	230	150	400
	WYTL	450	60	300
68	Barge	450	60	100
75	WLIC	450	150	400
	WLR (except 75307)	230	100-200*	400
	WLR 75307	450	100	400
84	Barge	450	50	100
87	WPB	450	100	400
90	Barge CGB 90012	450	60	100
	Barge CGB 90013	230	100	100
99	Barge	230	70	100
100	WLI 313	450	60	400
	WLI 642	450	100	400
	WLIC 315	450	150	400
110	WPB	450	200	400
120	Barge	450	225	100
130	Barge	230	70	100
140	WTGB	450	200	1,500
154	WPC	450	200‡	2,000
160	WLIC	450	200	2,000
175	WLM†	450	400	2,000
210	WMEC†	450	400	3,000
225	WLB†	450	2 × 400	3,000
240	WLBB†	450	2 × 400‡	10,000
270	WMEC†	450	2 × 400	4,000
282	WMEC†	450	2 × 400	4,000
295	WIX†	450	300	2,000
378	WHEC†	450	2 × 400	6,000
400	WAGB†	450	4 × 290	8,000
418	WMSL†	450	4 × 400‡	12,000
420	WAGB†	450	4 × 400‡	16,000
<p>*100 A (75401-75405 and 75408); 175 A (75406 and 75409); 200 A (75407, 75500, and 75501). †Uses 400 A MIL-C-24368 receptacle(s) with standard Navy plug(s). ‡Cutter is equipped with more receptacles than shown; maximum current represents load for hotel services only and no heavy machinery operation.</p>				

3.3.6 Hull grounding straps. Immediately after successful drydocking and before connecting the electrical shore tie cable to the vessel, electrically ground the vessel's hull to earth, typically via cables to the shore power service grounding bus ashore. Such is required to provide personnel shock protection and a safe discharge path for potential lightning strikes. When a vessel is out of the water in a floating dry dock, electrically bond both hulls together instead to prevent a potential from developing between them.

NOTE

The grounding straps of this section are for personnel electrical shock protection and are not to be connected to waterborne cutters. Such grounding straps should not be confused with the return current cables used with electric arc welders. See SFLC Standard Specification 0740 for electric arc welding cable requirements.

3.3.6.1 Cable lugs. Tightly secure the grounding cable lugs to the grounding plates; ensure the lug contact area is cleaned thoroughly to bare metal, and that resistance of the connection is a maximum of 125 microhms.

3.3.6.2 Cable size. Ensure that the total cross sectional area of all ground cables is one million circular mils (1000 kcmil) minimum for each 1000 amperes of shore power capacity per 100 feet of run (one or more cables, connected in parallel, may be used to meet the cross sectional area requirements). Grounding cables smaller in diameter than 85 MCM (No. 1 AWG) are not permitted.

3.3.6.3 Cable insulation. All grounding cables shall have completely insulated copper conductors with an insulation resistance value of no less than 0.1 megohm.

3.3.7 Compressed air. Provide dry, compressed air as follows:

3.3.7.1 Vessels with compressed air system. Connect the compressed air supply to the vessel's existing compressed air system, at their normal operating pressure (psig) and volume (cfm).

3.3.7.2 Vessels without compressed air system. For vessels without compressed air system, do the following:

3.3.7.2.1 Furnish all equipment and materials necessary to provide compressed air to a distribution manifold. The manifold shall be fitted with an inlet connection, two air hose outlet connections fitted with stop valves, and a relief valve connection, set to relieve air pressures at 125% above normal operating pressure. Secure the manifold at a location specified by the Coast Guard Inspector. Provide slack in the air supply hose to the manifold to allow for manifold relocation.

3.3.7.2.2 Provide two 100-foot air supply hoses for the ship's force use. Ensure adequate capacity to supply 100 psig air to both outlets at 50 cfm each.

3.3.8 Hazardous material/hazardous waste disposal. In accordance with all Federal, state, and local environmental, health and safety regulations, the Contractor shall accept and properly dispose of the amounts of hazardous materials from the vessel as specified in the work item. The Contractor shall do the following:

3.3.8.1 Use suitable flow (volumetric) measuring equipment to record the amount of liquids removed.

3.3.8.2 Submit documents to the COR for the removed and disposed quantities of hazardous wastes to certify compliance with all Federal, state, and local regulations.

NOTE

The materials listed in the “Temporary Services, Provide” item may be classified as hazardous materials or hazardous waste depending on state and local regulations. The vessel environmental coordinator may assist with determination of waste category.

3.3.9 Heavy lift equipment. Provide heavy lift equipment services for use by the COR upon request, in minimum 15-minute increments, with at least four working hours notice, in the form of a crane or a forklift, with operator and riggers. Ensure that crane and associated weight handling gear and equipment, have a minimum two-ton lift capacity and an outreach sufficient to reach an offload point on the forecastle, fantail, or flight deck, as applicable.

3.3.10 Water supply. Provide water supply, as specified below.

3.3.10.1 Potable water. Provide fresh, potable water, utilizing the vessel’s potable water fill connection, in accordance with the U. S. Public Health Service (USPHS) regulations concerning the use of check valves or other automatic closure devices to prevent contamination of the fresh water source and all other applicable Federal, State, and local ordinances.

3.3.10.2 Hot-circulating water. Provide a shoreside hot-circulating water system to cross-connect into the vessel’s hot-circulating water system. The system shall be capable of maintaining the vessel’s heated spaces at an ambient temperature of at least 65 degrees Fahrenheit. Ensure that the vessel’s hot-circulating water system is not over-pressurized and that all the vessel’s hot water circulating pumps are isolated.

3.3.10.3 Cooling water. Provide fresh or salt water and furnish all hoses and fittings necessary to supply water to the vessel’s auxiliary salt water (if installed), air conditioning, and refrigeration cooling systems. Ensure cooling water exiting the vessel is kept from running down the hull. Maintain the water supply pressure from 20 to 40 psig and provide a pressure gauge calibrated to be accurate in this range.

3.3.10.4 Firemain system. Provide fresh or salt water to the vessel’s firemain connection on deck for fire protection. Maintain the pressure between 90 and 110 psig to the vessel, while discharging 90 to 110 gpm solid streams through two 1-1/2 inch fire hoses. Ensure that the firemain system is protected from freezing, when applicable. In the event required water supply is taken from the city fresh water system, the Contractor shall be responsible for complying with local ordinances and U.S. Public Health Services regulations concerning the use of check valves or other automatic closure devices in the event the cutter’s fire pump is started.

3.3.10.4.1 Contractor-furnished supporting equipment. Provide all hoses and fittings needed to supply water to the system and a pressure gauge to show the water pressure at the connection to the ship.

3.3.10.4.2 Additional supply lines. Should any portion of the firemain system be secured due to system repairs, the Contractor shall provide additional supply lines to energize all working portions of the system. The number of required additional lines shall be as specified in Table IV below or as directed by the Coast Guard Inspector.

3.3.10.4.3 Booster pumps. Booster pumps, if used and not in continuous operation, shall be fitted with a controller or starter switch located near the gangway, readily available to the crew.

3.3.10.4.4 Connection. Ensure that the firemain connection shall be arranged such that a continuous flow is provided to prevent freezing.

TABLE IV - FIREFIGHTING EQUIPMENT

VESSEL LENGTH (feet)	TYPE	ADDITIONAL SUPPLY LINES	
		fore	aft
65	WLI	1	1
	WLR	1	1
65	WYTL	1-port	1-stbd
75	WLIC	1	1
	WLR	1	1
82	WPB	1	1
87	WPB	1	1
100	WLI	1	2
	WLIC	1	2
110	WPB	2	2
140	WTGB	2	2
154	WPC	2	2
160	WLIC	1	1
167	WAT	1	1
175	WLM	1	1
210	WMEC	2	2
225	WLB	2	2
240	WLBB	1-port	1-stbd
270	WMEC	2	2
282	WMEC	2	2
295	WIX	2	2
378	WHEC	2	2
400	WAGB	2	2
418	WMSL	01 DK & Boat DK	3
420	WAGB	1-port	1-stbd

3.3.11 Steam. Supply saturated steam, via a Contractor-furnished hose, to the vessel's shore tie connection, as applicable in accordance with Table V.

TABLE V - STEAM PROVISION

VESSEL		STEAM HEATING	
LENGTH (feet)	TYPE	Boiler Output	
		lbs/hr	psig
210	WMEC	840	100
282	WMEC	3,000	100
378	WHEC	2,300	100
400	WAGB	3,700	100
420	WAGB	4,200	100

3.3.11.1 Valves. Install a reducing valve and a safety valve in the supply line to protect the vessel's system.

3.3.11.2 Trap. Provide a steam trap near the shore tie connection on the vessel.

3.3.11.3 Gauge. Install a steam gauge in the line at a point where the steam enters the vessel's system.

3.3.11.4 Condensate. Collect and recycle or dispose of the condensate. Furnish all necessary hoses and fittings.

3.3.12 Refuse disposal. Furnish a dumpster on the pier, near the gangway, for the Ship's force use. The dumpster shall be emptied at least once each week and maintained in accordance with all applicable Federal, state, and local laws and regulations concerning garbage and refuse disposal.

3.3.13 Sewage disposal. Dispose of sewage (black and grey water) as specified in Table VI below, from the vessel's shipboard retention tank. Disposal shall be by dockside connection or tank truck, in accordance with all applicable Federal, state, and local codes. Tank trucks shall remove the effluent during normal working hours and within three hours of notification from the Coast Guard Inspector.

3.3.13.1 Hoses. Provide all necessary discharge hoses to connect the vessel's four-inch female camlock fitting to the dockside connection or truck.

3.3.13.2 Pump. The Contractor may use the vessel's installed sewage pump to pump out the retention tank; however, if any part of the transfer hose extends above the elevation of the main deck railing, a temporary booster pump shall also be furnished and installed.

TABLE VI - SEWAGE (BLACK & GREY WATER) DISPOSAL

VESSEL		SEWAGE DISPOSAL	
LENGTH (feet)	TYPE	gallons/day	
		Black	Grey
65	WLI	200	300
	WLR	200	300
	WYTL	200	500
75	WLIC	200	350
	WLR	200	300
87	WPB	–	400*
100	WLI	250	500
	WLIC	250	500
110	WPB	100	500
120	BARGE	300	500
140	WTGB	300	850
154	WPC	150	600
160	WLIC	250	400
175	WLM	300	800
210	WMEC	600	3,000
225	WLB	1,000	4,000
240	WLBB	1,000	4,000
270	WMEC	–	4,000*
282	WMEC	–	4,000*
295	WIX	2,000	5,000
378	WHEC	5,000	10,000
400	WAGB	–	8,000*
418	WMSL	2,000	6,000
420	WAGB	–	8,000*
*Comingled black and grey water.			

3.3.14 Storage - general. Provide the storage facilities specified in the work item meeting the following requirements while the vessel is at the Contractor's facility:

3.3.14.1 Location. Locate the storage facilities as close as practicable but no further than a ten minute walk from the vessel's berth. The facilities shall be accessible 24 hours a day, seven days a week.

3.3.14.2 Shelving. Equip the facilities with shelves which shall be at least two feet deep along all exterior walls, constructed to accommodate loads of at least 100 pounds per square foot, and from the floor to at least six feet high above the deck with shelf spacing approximately 24 inches.

3.3.14.3 Storage security. Ensure the facility is weathertight and capable of being secured with a lock provided by the vessel.

3.3.14.4 Lighting. Provide adequate lighting inside the facility and outside the facility's entrance, energized during all hours of darkness.

3.3.14.5 Facilities. Provide the following facilities indicated in Table VII below as specified in the work item. Each facility shall be fitted with an access which will permit the entry of a small forklift transporting a four-foot by four-foot loaded pallet.

TABLE VII - STORAGE FACILITIES

FACILITY	SIZE (ft³)	PURPOSE and/or CRITERIA
DRY STORES	2500	For ship's force to store nonflammable liquids and nonperishable items.
PAINT AND FLAMMABLE STORES	1000	For ship's force to store paints and other flammables; meet all Federal state, and local codes for flammable storerooms.
REFRIGERATED STORES	250	Frozen foods: Contain an evaporator equipped with a defrost cycle and capable of maintaining a constant regulated temperature of -5°F, ± 5°F.
	450	Refrigerated foods: Capable of maintaining a constant temperature of 37°F, ± 5°F

3.3.15 Small boat storage. When a small boat (e.g., Motor Surf Boat [MSB], Motor Cargo Boat [MCB], Cutter Boat Large/Medium [CBL/CBM], Rigid Hull Inflatable (RHI) boat, or Landing Craft Vehicle and Personnel [LCVP]) is removed as interference to Contractor-work, provide a suitable pier side storage cradle, for safely storing said boat.

3.3.15.1 Cradle design. Ensure that the temporary cradle meets the following criteria:

- Structure is templated from the geometry and arrangement of the contact support areas of the existing cradle onboard the vessel, to provide same or more support area as that which is provided by the existing cradle.
- Arrangement will allow ship's force to perform maintenance on the small boat, without modification of the cradle.
- Structure is manufactured using the most economical methods and materials available, and is capable of supporting the full weight of the small boat under normal conditions experienced during routine maintenance.
- Contact surfaces are no harder or rougher than the contact surfaces for existing cradle onboard the vessel.

3.3.15.2 Boat accessibility. Ensure the storage is located in the vicinity of the vessel, and is unrestricted, to allow for ship's force to complete maintenance during normal working hours for the entire performance period.

3.3.15.3 Boat protection. Provide full protection that can be safely and completely secured when the small boat is left unattended (e.g. watertight cover, storage in a warehouse or shop, etc.), in addition to isolating the boat from the elements.

3.3.15.4 Boat transportation. Transport each small boat to its storage area within one week of docking the vessel and back to the vessel prior to the end of the performance period.

4. NOTES

4.1 Ship's force responsibilities. The ship's force will provide a Coast Guard Inspector to monitor the installation and maintenance of the temporary services. The Coast Guard Inspector will:

- Maintain a log detailing installations, irregularities, and disruptions experienced with temporary services.
- Assist the Contractor in identifying locations aboard the vessel, and barge if applicable, where the Contractor may tie into the ship's systems.
- Maintain a Crane Service Log to include date used, purpose, start and stop times, number of lifts performed, and the name of the operator.

4.2 Coast Guard data network connectivity. Ship's Force will use CGTO PG-85-00-920-T (CGOne Connectivity for Cutters in Commercial Shipyards Process Guide) for planning, set-up, maintaining and terminating Coast Guard data network connectivity during vessel repairs at commercial shipyards or other non-Coast Guard facilities.